Appendix H – ESA Section 7 Consultation Reasonable and Prudent Measures and Terms and Conditions Incorporated into the Galena Project

The following Reasonable and Prudent Measures and Terms and Conditions from ESA section 7 consultation with NMFS and the USFWS are non-discretionary and must be implemented as part of the Galena Project proposed action to minimize the amount or extent of incidental take of bull trout and steelhead.

USFWS Biological Opinion dated April 23, 2013

8.3 Reasonable and Prudent Measures

The Service believes that the following Reasonable and Prudent Measures (RPMs) are necessary and appropriate to minimize impacts of incidental take of bull trout. The MNF shall:

1. Minimize the potential for incidental take from construction activities by limiting the operation of heavy equipment and soil disturbance in the riparian area and channel and bank revegetation efforts.
2. Minimize the risk of adverse effects to bull trout due to fish salvage activities by following NMFS guidelines for safe fish capture and release.
3. Develop effective erosion and pollution control measures and implement them throughout the area of disturbance. The measures shall minimize the movement of soils and sediment both into and within the stream, and will stabilize bare soil over both the short term and long term.
4. Monitor Project implementation during and after construction, including all erosion control measures and plantings for site restoration.

8.4 Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the Act, the MNF must comply with the following Terms and Conditions, including reporting and monitoring requirements, which implement the reasonable and prudent measures described above. These Terms and Conditions are non-discretionary.

1. The following terms and conditions are necessary for the implementation of RPM 1 (construction activities):
    a. During the period of in-water work, a project inspector shall monitor construction activities frequently to ensure that all the following provisions are met.
    b. All work within the active channel of Vinegar Creek will be completed within the ODFW-recommended in-water work period (July 15- August 15). Any adjustments to the in-water work period will first be approved by, and coordinated with the Service and ODFW.
    c. Alteration or disturbance of stream banks and existing riparian vegetation will be minimized. Where bank work is necessary, bank protection material shall be placed to maintain normal waterway configuration whenever possible.
    d. Effective erosion control measures shall be in place at all times during the contract.

e. Construction within the five-year floodplain will not begin until all temporary erosion controls (e.g., straw bales, silt fences, or other methods) are in place within the riparian area. Erosion control structures will be maintained throughout the life of the Project.

2. The following terms and conditions are necessary for the implementation of RPM 2 (fish salvage):

    a. A migratory corridor shall be provided for all life stages of all salmonid species throughout the construction period.

    b. The entire fish salvage operation must be conducted or supervised by a fishery biologist experienced with fish salvage activities and competent to ensure the safe handling of ESA-listed fish.

    c. If electrofishing is utilized to capture bull trout, conduct fish capture when stream temperatures are at or below 15 degrees C (59 degrees F), to the extent practicable. Recommend work be conducted early and late in the day when water temperatures are cooler to minimize stress to bull trout and other salmonids.

    d. Handle fish as gently as possible. Keep fish in water to the maximum extent possible during capture and transfer procedures to prevent the added stress of out-of-water handling.

    e. Release fish into Vinegar Creek as quickly as possible, and as near as possible to the capture sites.

3. The following terms and conditions are necessary for the implementation of RPM 3 (erosion and pollution control):

    a. A Pollution Control Plan (PCP) will be prepared by the contractor. The PCP will outline how and to what specifications various erosion and pollution control devices will be used to meet water quality standards, and will provide a specific inspection protocol and time response. Erosion control measures shall be sufficient to ensure compliance with applicable water quality standards and this Opinion. The PCP shall be maintained on site and shall be available for review upon request.

    b. All exposed areas will be replanted with native shrubs and locally present herbaceous species. Erosion control planting will be completed following completion of work, as early as possible and dependent on timing when survival will be the most successful.

    c. Altering native riparian vegetation will be minimized. Invasive exotic species will not be protected, although invasive species will not be chemically treated. Native riparian understory and overstory vegetation will be replanted using local native stock.

    d. All erosion control devices will be inspected throughout the construction period to ensure that they are working adequately. Erosion control devices will be inspected weekly during construction. Should a control measure not function effectively, the control measure will be immediately repaired or replaced. Additional erosion controls will be installed as necessary.

    e. A supply of erosion control materials (e.g., straw bales and clean straw mulch) will be kept on hand to cover small sites that may become bare and to respond to sediment emergencies.

    f. All equipment that is used for in-stream work will be cleaned prior to entering the two-year floodplain. External oil and grease will be removed, along with dirt and mud.

Untreated wash and rinse water will not be discharged into streams and rivers without adequate treatment.

g. Unneeded material removed during excavation shall only be placed in upland locations where it cannot enter sensitive aquatic habitat. Conservation of topsoil removal, storage and reuse) will be employed when practicable.

h. Project actions will follow all provisions of the Clean Water Act (40 CFR Subchapter D) and Department of Environmental Quality (DEQ) provisions for maintenance of water quality standards. Toxic substances shall not be introduced above natural background levels in Waters of the State in amounts which may be harmful to aquatic life.

i. Areas for fuel storage, refueling and servicing of construction equipment and vehicles will be located 100 feet above the top of bank. Overnight storage of non-wheeled vehicles is allowed within the two-year floodplain during the in-water work window.

j. Hazmat booms will be maintained on-site in locations where there is potential for a toxic spill into aquatic systems. "Diapering" of vehicles to catch any toxicants (oils, greases, brake fluid) is mandatory when the vehicles have any potential to contribute toxic materials into aquatic systems.

4. The following terms and conditions are necessary for the implementation of RPM 4 (monitoring):

a. Erosion control measures shall be monitored until the threat of erosion from the Project has diminished.

b. All significant riparian replant areas will be monitored to insure the following:

1. Plantings are performing correctly and have an adequate success rate (success rate depends on the planting density, but the goal is to have a functional riparian vegetation community).

11. Failed plantings and structures will be replaced, if replacement will potentially succeed. If not, plantings at other appropriate locations will be done.

111. A plant establishment period (three year minimum) will be required for all riparian mitigation plantings.

c. By December 31 of the year following the completion of any construction activities, the MNF shall submit to the Service (La Grande Field Office) a monitoring report with the results of the implementation and post implementation monitoring of the Project. The La Grande Field Office is located at 3502 Highway 30, La Grande, OR 97850.

NMFS Biological Opinion dated June 21, 2013

2.8.3 Reasonable and Prudent Measures

"Reasonable and prudent measures" are nondiscretionary measures to minimize the amount or extent of incidental take (50 CFR 402.02).

The NMFS believes that the following Reasonable and Prudent Measures (RPMs) are necessary and appropriate to minimize impacts of incidental take of steelhead. The MNF shall:

1. Minimize the risk of adverse effects to steelhead due to construction-related activities and fish salvage activities by following NMFS guidelines for safe fish capture and release.
2. Develop effective erosion and pollution control measures and implement them throughout the area of disturbance. The measures shall minimize the movement of soils and sediment both into

and within the stream, and will stabilize bare soil over both the short term and long term to prevent discharge into streams.

3. Monitor project implementation during and after construction, including all erosion control measures and plantings for site restoration.

2.8.4 Terms and Conditions

The terms and conditions described below are non-discretionary, and the MNF or any applicant must comply with them in order to implement the reasonable and prudent measures (50 CFR 402.14). The MNF or any applicant has a continuing duty to monitor the impacts of incidental take and must report the progress of the action and its impact on the species as specified in this incidental take statement (50 CFR 402.14). If the following terms and conditions are not complied with, the protective coverage of section 7(o)(2) will likely lapse.

1. To implement reasonable and prudent measure #1 (fish salvage), the MNF shall:
    a. During the period of in-water work, a project inspector shall monitor construction activities frequently to ensure that all the following provisions are met.
    b. Complete all work within the active channels containing MCR steelhead critical habitat within the ODFW-recommended in-water work period (July 15- August 15). Any adjustments to the in-water work period will first be approved by, and coordinated with the NMFS and ODFW.
    c. Provide a migratory passage corridor for all life stages of all salmonid species throughout the instream construction period.
    d. Ensure that the entire fish salvage operation must be conducted or supervised by a fishery biologist experienced with fish salvage activities and competent to ensure the safe handling of ESA-listed fish.
    e. Ensure if electrofishing is used to capture steelhead, conduct fish capture when stream temperatures are at or below 15 degrees C (59 degrees F), to the extent practicable. Recommend work be conducted early and late in the day when water temperatures are cooler to minimize stress to steelhead and other salmonids.
    f. Ensure that salvaged fish are handled as gently as possible, keeping fish in water to the maximum extent possible during capture, transfer and release procedures to prevent the added stress of out-of-water handling.
    g. Release captured fish into appropriate stream sites (pools, cooler waters) as quickly as possible, and as near as possible to the capture sites.
2. The following terms and conditions are necessary for the implementation of RPM #2 (erosion and pollution control), the MNF shall:
    a. Minimize alteration or disturbance of stream banks and existing riparian vegetation. Where bank work is necessary, bank protection material shall be placed to maintain normal waterway configuration whenever possible.
    b. Have in place effective erosion control measures at all times during the construction period at areas susceptible to producing sediment discharge into streams.
    c. Not begin construction within the five-year floodplain until all temporary erosion controls (e.g., straw bales, silt fences, or other methods) are in place within the adjacent

riparian area. Erosion control structures will be maintained throughout the life of the Project.

d. Revegetate soils disturbed by construction activities within riparian areas.

e. Have a prepared Pollution Control Plan (PCP) from the contractor prior to working in and around RHCAs. The PCP will outline how and to what specifications various erosion and pollution control devices will be used to meet water quality standards, and will provide a specific inspection protocol and time response. Erosion control measures shall be sufficient to ensure compliance with applicable water quality standards and this Opinion. The PCP shall be maintained on site and shall be available for review upon request.

f. Replant all exposed areas with native shrubs and locally present herbaceous species. Erosion control planting will be completed following completion of work, as early as possible and dependent on timing when survival will be the most successful.

g. Minimize the altering/removal of native riparian vegetation. Invasive exotic species will not be protected, and only pre-approved chemicals may be used for invasive species control. Native riparian understory and overstory vegetation will be replanted using local native stock.

h. Inspect all erosion control devices throughout the construction period to ensure that they are working adequately. Erosion control devices will be inspected weekly during construction. Should a control measure not function effectively, the control measure will be immediately repaired or replaced. Additional erosion controls will be installed as necessary.

i. Keep on hand an ample supply of erosion control materials (e.g., straw bales and clean straw mulch) to cover small sites that may become bare and to respond to sediment emergencies.

j. Ensure all equipment that is used for in-stream work will be cleaned prior to entering the two-year floodplain. External oil and grease will be removed, along with dirt and mud. Untreated wash and rinse water will not be discharged into streams and rivers without adequate treatment.

k. Ensure that unneeded material removed during excavation shall only be placed in upland locations where it cannot enter sensitive aquatic habitat. Conservation of topsoil (removal, storage and reuse) will be employed when practicable.

l. Ensure all project actions follow all provisions of the Clean Water Act (40 CFR Subchapter D) and Department of Environmental Quality (DEQ) provisions for maintenance of water quality standards. Toxic substances shall not be introduced above natural background levels in Waters of the State in amounts which may be harmful to aquatic life.

m. Ensure areas for fuel storage, refueling and servicing of construction equipment and vehicles will be located at least 100 feet above the top of bank. Overnight storage of non-wheeled vehicles is allowed within the two-year floodplain during the in-water work window.

n. Ensure that hazmat booms are maintained on-site in locations where there is potential for a toxic spill to occur in or near aquatic systems. "Diapering" of vehicles to catch any toxicants (oils, greases, brake fluid) is mandatory when the vehicles have any potential to contribute toxic materials into aquatic systems.

3. The following terms and conditions are necessary for the implementation of RPM #3 (monitoring), the MNF shall:
    a. Monitor erosion control measures until the threat of erosion from the Project has diminished.
    b. Monitor significant riparian replant areas to insure the following:
        i. Plantings are performing correctly and have an adequate success rate (success rate depends on the planting density, but the goal is to have a functional native vegetation riparian plant community).
        ii. Failed plantings and structures will be replaced, if replacement will potentially succeed. If not, plantings at other appropriate locations will be conducted and evaluated for success.
        iii. A plant establishment period (three year minimum) will be required for all riparian restoration and mitigation plantings.
    c. By December 31 of the year in which construction activities addressed in this opinion were completed, provide a post-implementation report to address construction effects that includes: •
        i. The visually monitored downstream extent of suspended sediment plumes. Downstream suspended sediment monitoring shall be conducted daily during project implementation and again during the first high flow event.
        ii. A summary of pollution and erosion control inspection results, including a description of any erosion control failure, contaminant release, and efforts to correct such incidences.
        iii. Methods of work area isolation and take minimization implemented.
        iv. Fish capture and release methods.
        v. Number of MCR steelhead captured.
        vi. Location and condition of fish released.
        vii. Any incidence of observed injury or mortality.
    d. The MNF shall submit the report to NMFS - Eastern Oregon Branch Office located at: 3502 Highway 30, La Grande, OR 97850.